

### REMARKS

This is in response to the Office Action dated March 08, 2005. In the Office Action, Claims 14, 16, 29 and 32 were objected to for alleged informalities, Claims 58-63 were allowed, Claims 8-29, 34-42 and 51-57 were indicated to be allowable if written into independent form, and Claims 1-7, 30-33 and 43-50 were rejected under 35 U.S.C. 103(a). As respectfully submitted in the amended claims submitted herewith, the informalities in Claims 14, 16, 29 and 32 have been corrected, Claims 8, 34, and 37 have been written into independent form, and Claims 1-2, 8, 14, 16, 29, 32, and 43 have been amended. It is respectfully submitted that, as amended, all the pending claims are allowable.

#### Amendment

The informalities in Claims 14, 16, 29 and 32 have been corrected, and the objection is thus overcome.

Claim 1 has been amended to further limit the window having an elongate edge extending substantially perpendicularly to an elongate direction of the planar structure. Such amendment is fully supported by the drawings of Figures 1, 8 and 11. The orientation of the window is not only an optional design choice, but is also a feature which facilitates measurements or cuttings with various seam allowances. For example, as shown in Figure 6, the lower guide bar of the seam allowance guide is aligned with the edge of the underlying object. The elongate edge extending perpendicularly to the elongate direction of the planar structure allows the seam allowance guide to slide and rest at various positions to indicate various seam allowances. Should the elongate edge of the window extend parallel to the elongate direction of the measuring device, the adjustable seam allowances will be ultimately limited.

#### Rejection Under 35 U.S.C. 103(a)

Claims 1-3 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,577,328 to Kerry, Sr. in view of U.S. 1,523,919 to Vitek et al.

As amended, Claim 1 includes a seam allowance guide movably attached to the planar structure at the window thereof.

Kerry discloses an electrical conduit entry template 10 having two flat, square pieces 12, 14 which when fitted together are coaxial (col. 4, lines 16-21). Further in col. 4, line 66 to col. 5, line 4, Kerry discloses "As seen in FIGS. 1 and 2, the smaller portion 12 of the template 10 is sized to fit within the large outer portion so that edges of inner portion 12 rest again a narrow shoulder 12 optionally formed entirely around the perimeter or edge of a square, central opening 18 formed in the outer portion 14." Kerry further discloses "Alternatively, for economy of manufacture, central opening 18 in outer portion 14 may be formed without shoulder 16 to stop central portion from passing through the opening (col. 5, lines 5-8)".

As it has been clearly shown, the inner portion 12 of the template 10 either completely fills the opening 18 formed in the outer portion 14 or passes through the opening 18 without being attached thereto. In either case, the inner portion 12 cannot be "slidably attached to the outer portion 14. Therefore, Kerry fails to teach "a seam allowance guide to be movably attached to the planar structure at the window" as claimed in Claim 1.

Vitek et al. fails to teach a seam allowance guide removably attached to the planar structure; and consequently, fails to teach the seam allowance guide to be movably attached to the planar structure too.

As both Kerry and Vitek et al., individually or in combination, fail to teach every element as claimed, a *prima facie* case of obviousness is not established, and the rejection is respectfully traversed.

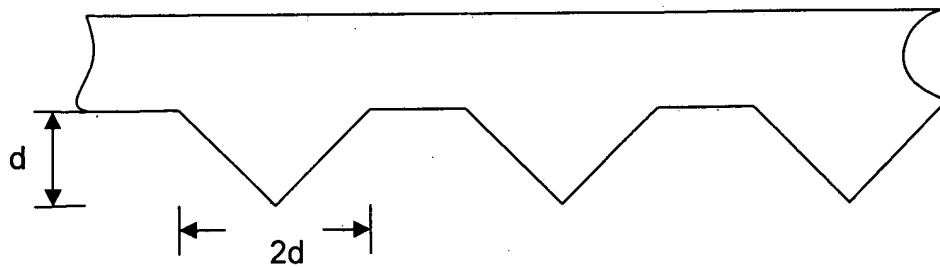
Claims 4, 43-45 and 48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kerry, Sr. and Vitek et al. as applied to Claims 1-3 and 5 above, further in view of U.S. 3,598,493 to Fisher.

Again, both Kerry, Sr. and Vitek et al. fail to teach the seam allowance guide to be movably attached to the planar structure at the window. Fisher discloses an optical graduated rule that provides alternate areas of light transmission and light reflection. Fisher does not teach the seam allowance guide; and consequently, Fisher fails to teach the seam allowance guide to be movably attached to the planar window.

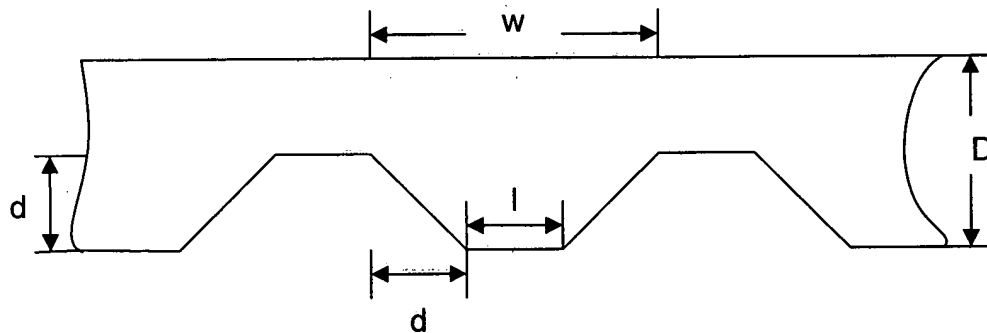
As Kerry, Sr., Vitek et al. and Fisher, individually or in combination, fail to teach every element as claimed in Claims 1 and 4, a *prima facie* case of obviousness is not established, and the rejection over Claim 4 is respectfully traversed.

As understood, the term "graduated rule" simply means a ruler on which graduations, that is, a scale is formed. A graduated rule does not explicitly or implicitly suggest any "visual graduation" at all. Further, as disclosed by Fisher, the optical graduated rule (the member 10) includes a remote side configured into alternate areas that have light-to-dark ratio of about 100:1 (col. 4, lines 70-71) or 60:1 (col. 6, line 65). In col. 5, lines 54-56, Fisher further emphasizes that "An important factor in graduated rules used in optical measurement systems is the **abruptness between adjacent light and darkness.**" As it is well understood in the art, the refraction is typically an adverse optical effect for achieving the "abruptness between adjacent light and darkness. Therefore, in col. 6, lines 7-32, Fisher specifically discloses that the refraction of the light incident on the graduated rule is insignificant. Such teaching thus teaches away of the "visual graduation" as claimed in Claim 4, and there is lack of motivation or suggestion of the modification or combination as proposed by the Examiner to read on Claim 4.

Regarding to Claims 43-45 and 48, Fisher does not explicitly or implicitly discloses that the raised portion extending from the remote surface of the optical graduated rule can be used as the markings. Moreover, as the objective of Fisher is to obtain alternate light and dark areas for an incident light beam, the two opposing side surfaces for each raised rib, (the surfaces 20 and 20' as shown in Figure 1 and the surface 182 as shown in Figure 11) have to be inclined with a  $45^\circ$  angle. In this manner, the minimum width for each inclined surface has to be the depth of the raised rib  $d$  as shown in the following figure. To obtain the light areas, each incident beam has to be totally reflected twice; and therefore, a pair of the inclined surfaces is always required for each raised rib. Therefore, the minimum width for each raised rib will be  $2d$  as shown in the following drawing. In other words, should anyone use such raised rib as a marking for the optical graduated rule, the minimum width of such marking width has to be as wide as  $2d$ .



In another configuration as shown in the following, the minimum width for each light area can be reduced as  $d$ , however, the minimum width required for each raised rib has to be increased as  $2d+l$ .



In all the examples disclosed by Fisher, the thickness  $d$  is about one half of the total thickness of the optical graduated rule  $D$ , that is,  $d \approx D$  in all embodiments as shown in Figures 1-11. Therefore, should one of ordinary skill in the art use the raised ridge as a marking, a minimum width for each marking will be  $2d$ , which is the thickness of the optical graduated rule  $D$ . Unless the optical graduated rule is made extremely thin that the ultimately degrades the total reflection effect, the very large width of each marking allows only rough measurement or cutting of the underlying object. That is, as the width of each marking is so large, precise and fine measurement or cutting cannot be realized by incorporation of the raised ridge disclosed by Fisher. On the other hand, when the raise rib is configured with very small thickness to result in very narrow light strips appearing on the upper surface, the rest of the graduated rule will appear dark, and nothing underlying the graduated rule will be visible except for the very narrow light strips. The Applicant does not under how the object underlying the graduated rule can be measured when the object is almost invisible except for those very fine lines underlying the raised ridges (the total-reflection structure).

Fisher does not teach or suggest that the total-reflection structure formed on the remote surface of the optical graduated rule can be used as a marking of a device for measuring an underlying object. On the contrary, as the total-reflection structure appears to be too wide to be used as a marking for accurate measurement or cutting, there is no reasonable expectation of success for incorporating Fisher to modify the combined teaching of Kerry, Sr., and Vitek. Moreover, even if the total-reflection structure disclosed by Fisher is made thin enough for performing measurement or cutting, as the majority part of the object underlying the graduated rule is invisible to the user, the measurement or cutting of the underlying cannot possibly be performed, particularly under the condition that the whole object is covered by the graduated ruler. Therefore, there is no reasonable expectation of success for the combination or modification proposed by the Examiner.

Therefore, as the cited references, Kerry, Sr., Vitek et al. and Fisher fail to suggest the desirability of the transparent markings in the form of elongate raised ribs, plus that there is no reasonable expectation of success of the combination or modification proposed by the Examiner, the *prima facie* case of obviousness is not established. The rejection over Claims 43-45 and 48 are respectfully traversed.

Claims 1-3 and 5-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,193,284 to Lin in view of U.S. 5,577,328 to Kerry, Sr. and U.S. 1,523,929 to Vitek et al.

Lin discloses a multi-purpose drawing ruler having a ruler body 1 and a compass 8 attached to the ruler body 1. The Examiner cited the holes shown as diamonds on the ruler body 1 and the slot 811 in the compass 8 to read on "at least one window extending through the planar structure" as disclosed in Claim 1. As claimed in Claim 1, the measuring device further comprises a seam allowance guide extending through the window to be removably attached to the planar structure. Because the diamond holes formed in the ruler body 1 cannot allow the seam allowance guide to be extended through and/or removably attached thereto, such teaching does not read on "at least one window" as claimed in Claim 1.

With regard to the slot 811 in the compass 8, Lin discloses that the compass 8 includes a body 81, the slot 811 formed within the body, two pivots 814, 814' formed at two

opposing ends of the body 81, and a selection key 82 attached at the slot 81. The compass 8 is used draw a circle by defining one of the pivots 814 as a center, inserting a drawing pen in the hole 825 formed in the selection key 82, and turn the body 81 about the center 814. To facilitate drawings of circles in various dimensions, as clearly shown in Figures 7-8 and 10, the selection key 82 has to be operative to slide long an elongate direction of the body 81; and consequently, the slot 811 has a pair of elongate edges extending along the elongate direction of the body 81 of the compass 8. Therefore, Lin fails to teach the window having an elongate edge extending substantially perpendicularly to the elongate direction of the planar structure. Moreover, should one modify the slot 811 as a window having an elongate edge extending perpendicularly to the elongate direction of the planar structure, the selection key can only slide at a fixed level with respect to the pivot 814 or 814'. As a result, only the circle with the same dimension can be drawn, and the intended purpose of drawing circles with various dimensions will be rendered unsatisfactory.

Kerry, Sr. fails to teach the seam allowance guide to be movably attached to the planar structure. Vitek et al. fails to teach a seam allowance guide. Further, Kerry, Sr. specifically teaches that the inner portion 12 is a square piece, Kerry, Sr. thus fails to teach the window having an elongate edge extending perpendicularly to the elongate direction of the planar structure too.

As Lin, Kerry, Sr. and Vitek, individually or in combination, fails to teach every element as claimed in Claim 1, the rejection over Claims 1-3 and 5-7 are respectfully traversed.

Claims 30-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kerry, Sr. and Vitek et al. as applied to Claims 1-3 and 5 above, further in view of U.S. 3,738,010 to Carder.

As discussed above, Kerry, Sr. and Vitek et al., individually or in combination, fail to teach the seam allowance guide to be movably attached to the planar structure. Carder discloses a straight edge with non-slip insert, which is non-analogous to the measuring device as disclosed in Claims 30-32. Carder also fails to teach a window and a seam allowance guide as disclosed in Claim 1. Further, as disclosed by Carder, the non-slip insert comprises

a **rigid** annulus or ring 21 secured to a ring-shaped layer 22 at one end and a ring shape layer 12 such as Velcro at the opposite end. As it is clearly shown in Figure 2, all portions of the insert 21, particularly the ring-shaped layer 22 made of resilient material, is completely embedded within the grooves. Therefore, Carder fails to teach "a plurality of **elastomeric O-ring partially embedded** in the circular grooves as claimed in Claim 31. Therefore, the rejection over Claims 30-33 is respectfully traversed.

Claim 33 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kerry, Sr. and Vitek et al. as applied to Claims 1-3 and 5 above, further in view of U.S. 4,821,424 to Loggins.

Again, as discussed above, neither Kerry, Sr. nor Vitek et al. teaches the seam allowance guide to be moveably attached to the planar structure. As Loggins also fails to teach a seam allowance guide, the rejection over Claim 33 is respectfully traversed.

Claims 43-45, 48 and 49 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lin, Kerry, Sr. and Vitek et al. as applied to Claims 1-3 and 5-7 above, further in view of U.S. 3,598,493 to Fisher.

As recognized by the Examiner, Lin, Kerry, Sr. and Vitek et al. together fails to teach the ribs having at least a proximal end and a distal end opposing to the proximal end wherein the distal ends have a surface area different from that of the proximal ends and the ribs having a triangular cross section and an inverse trapezium cross section.

Fisher teaches a total reflection structure, that is, raised portions at the remote surface of the graduated rule. However, as discussed above, the raised portions are formed in order to result in total reflection of an incident light beam, so as to achieve a light-dark contrast of at least 60:1 between the inclined side surfaces raised portions and the areas adjacent thereto. Therefore, when a light beam is incident on the graduated rule from the upper surface thereof, only strips of light can be observed from the upper surface. In contrast with the strips of light, the remaining areas of the graduated rule only have 1/60 of the transmission of the light strips. Therefore, anything underlying the remaining areas of the graduated rule will be invisible from the upper surface of the graduated rule. In addition, as the intended

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purpose of the raised rib is to facilitate total reflection of the incident light beam, it appears that the width of the raised ribs will be too large to render an accurate measurement of the underlying object. If the raised ribs are made thin enough in order to obtain accurate measurement of the underlying object, what appears at the upper surface of the graduated rule will be very fine light strips spaced with each other by dark areas. That is, the user hardly see anything underlying the graduated rule, such that the measurement cannot be performed using such graduated rule.

There is thus no reasonable expectation of success of the combination of Lin, Kerry, Sr., Vitek et al. and Fisher; and therefore, the rejection over Claims 43-45, 48 and 49 are respectfully traversed.

Claims 43-45, 48 and 49 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 3 and 8 of U.S. Patent No. 6,799,379.

A terminal disclaimer is respectfully submitted as attached. The rejections over Claims 43-45, 48 and 49 are thus overcome.

In view of the foregoing, the application is believed to be in condition for allowance. Entry of the amendments and issuance of a Notice of Allowance is therefore respectfully requested. Should the Examiner have any suggestions for expediting allowance of the application, please contact applicant's representative at the telephone number listed below. If any additional fee is required, please charge Deposit Account Number 19-4330.

Respectfully submitted,

Date: 6/30/05

By: 

Customer No.: 007663

Kit M. Stetina  
Registration No. 29,445  
STETINA BRUNDA GARRED & BRUCKER  
75 Enterprise, Suite 250  
Aliso Viejo, California 92656  
Telephone: (949) 855-1246  
Fax: (949) 855-6371